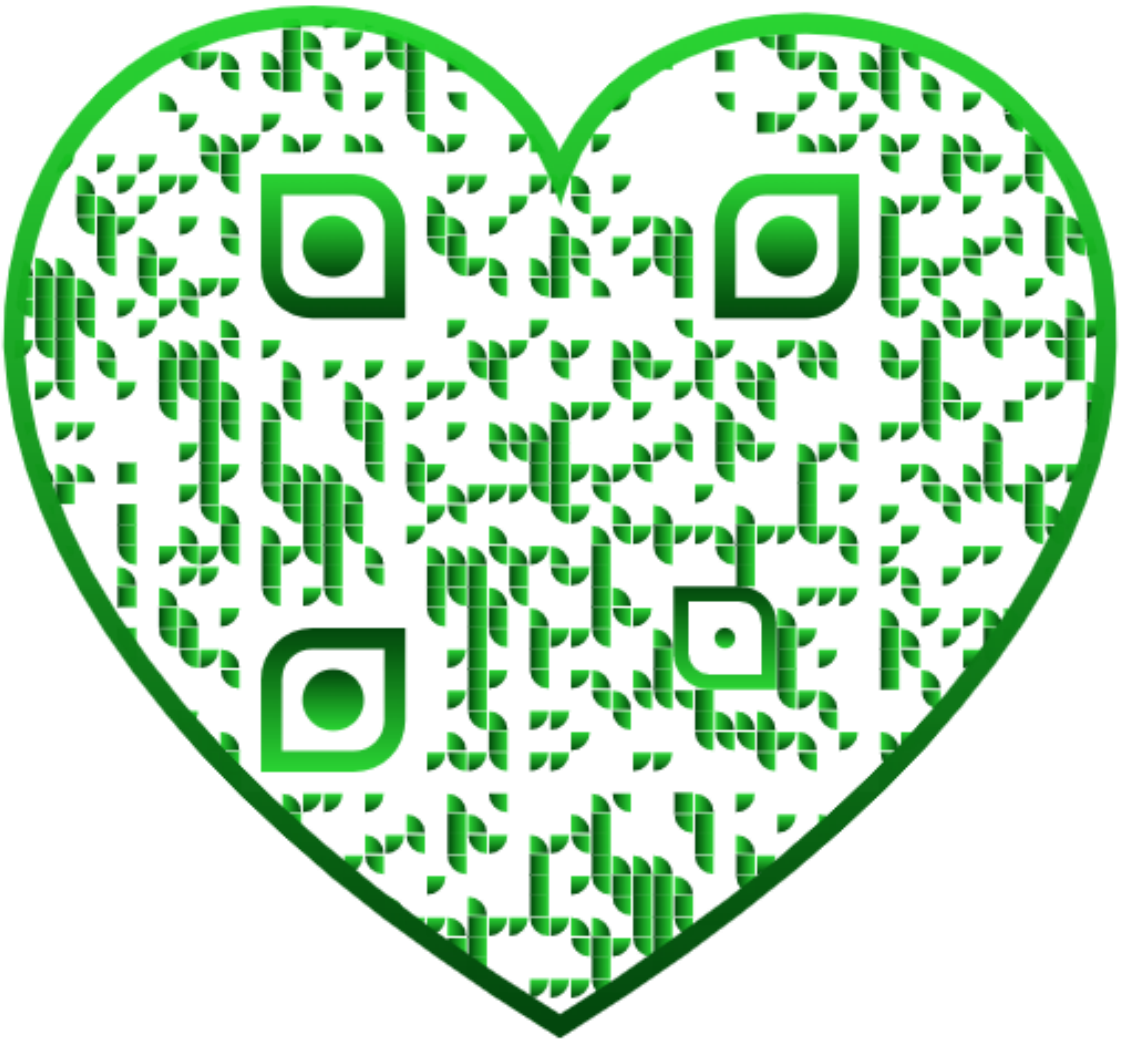
Viral infection

37B-B3

عناوين الحياه



VIRAL INFECTION

VIRAL WART(VERRUCAE)

Diagnosis :Verruca vulgaris

Causes: Viral (HPV)

Lesion :PRY (Multiple grayish or flesh - colored papules)

N.B: may respect koebner phenomenon

Figure 27-13. Verruca vulgaris: hands A 20-year-old immunosuppressed male with nephrotic syndrome. Multiple verrucae on the **(A)** dorsum and **(B)** palm of the hand.

Figure 27-12. Verruca vulgaris: thumb A 25-year-old male with hyperkeratotic, verrucous papules on the dorsal thumb. The dark points represent thrombosed capillaries. The lesion resolved with electrodessication, having failed to respond to cryosurgery.

Figure 27-11. Verruca vulgaris on face A 3-year-old boy with common wart on the moustache area.

VIRAL WART(VERRUCAE)

Diagnosis :Verruca plane

Causes: Viral (HPV)

Lesion :PRY (Multiple skin or dark color small papules +flat smooth surface)

Figure 27-18. Verruca plana A 12-year-old male kidney transplant recipient. Multiple brown keratotic papules are seen on the forehead and scalp.

VIRAL WART(VERRUCAE)

Diagnosis :Filiform warts

Causes: Viral (HPV)

Lesion : (small branches or twigs that are growing out of the skin. long, narrow and they are flesh-colored.)

Figure 27-19. Filiform and flat warts A 38-year-old male with HIV disease has a confluence of lesions on face and beard area. Lesions resolved after successful antiretroviral therapy.

VIRAL WART(VERRUCAE)

Diagnosis :planter wart

Causes: Viral (HPV)

Lesion : (Single or multiple hyperkeratotic lesion(s) slightly raised above skin surface

DD : Callus

detected.

Figure 27-16. Verruca plantaris: plantar feet A 71-year-old male with chronic lymphatic leukemia. Large and painful on pressure, warts are seen on the plantar feet and toes. Multiple warts were also present on the fingers. After many failed therapeutic modalities, he was successfully treated with electron beam radiation.

VIRAL WART(VERRUCAE)

Diagnosis :genital wart

Causes: Viral (HPV)

Lesion : (pedunculated grayish cauliflower mass called "condyloma acuminata" or in the form of grayish small papules.

DD :conndyloma acuminata cervix +cervical intraepithelial neoplasia

Figure 30-1. Papular warts: penis A 23-year-old male with penile lesions for 6 months. Multiple skin-colored papules on the penis and scrotum.

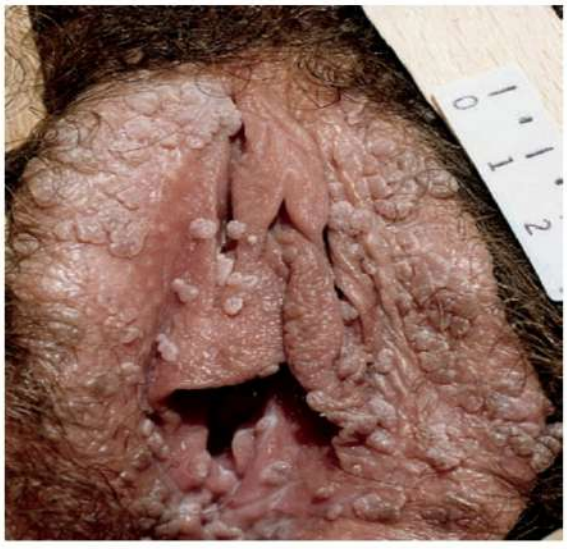


Figure 30-4. Condylomata acuminata: vulva Multiple, pink-brown, soft papules on the labia.

Figure 30-5. Genital warts A 37-year-old male with history of heart–lung transplantation and immunosuppression. Large condylomata acuminata are seen on the anal and perineal area.

Treatment of warts:

1. Electrocautery.
2. Chemical cautery:
   a. Salicylic acid 40% in case of plantar warts.
   b. Salicylic acid and lactic acid (5%-20%) in flexible collodion.
3. Cryotherapy with liquid nitrogen (-196°C).
4. Laser treatment with CO_2 or pulsed-dye lasers.
5. Topical keratolytics e.g. retinoic acid (Retin-A®), in case of plane warts.
5. Genital warts (condyloma acuminata) are treated by 25% podophyllin in tincture benzoin (contraindicated in pregnancy because it is a cytotoxic agent). Also, **imiquimod cream** can treat genital warts via stimulating local interferon production.

مكتبة التاج

Molluscum contagiosum

Diagnosis :molluscum contagiosum

Causes: Viral (pox virus)

Lesion : (solitary, painless, smooth surfaced, shiny, pearly-white papule, usually umblicated in the center.)

May Multiple lesioin

Figure 27-1. Molluscum contagiosum Typical umbilicated papules. Discrete, solid, skin-colored papules 3–5 mm on the chest of an adolescent female. The lesion with red halo is regressing spontaneously.

Figure 27-4. Molluscum contagiosum: face A 52-year-old male with HIV disease. Discrete and confluent umbilicated papules on the face.

Figure 27-2. Molluscum contagiosum: axilla Multiple, small pink papules in the axilla of a healthy child. The erythema surrounding the lesions represents an inflammatory response to MC and usually indicates the lesions are regressing.

Figure 27-3. Molluscum contagiosum: penis Multiple, small shiny papules on penile shaft.

HERPES simplex type1:

Figure 27-31. Herpes simplex: Typical lesion A 39-year-old male with lesion on the abdomen above the waist. Grouped vesicles on an erythematous base/plaque are seen. The lesion is recurrent.

PRIMARY ATTACK

Figure 27-34. Herpes simplex: primary infection of the palm A 28-year-old female with a painful lesion on the palm for 3 days. A cluster of grouped pustules is seen on the palm. A red lymphangitis extends proximally on the wrist. The axillary lymph nodes were tender and enlarged. HSV-2 was detected on DFA. No antibodies to HSV-1 or -2 were detected, thus a primary infection.

HERPES simplex type1:

PRIMARY ATTACK

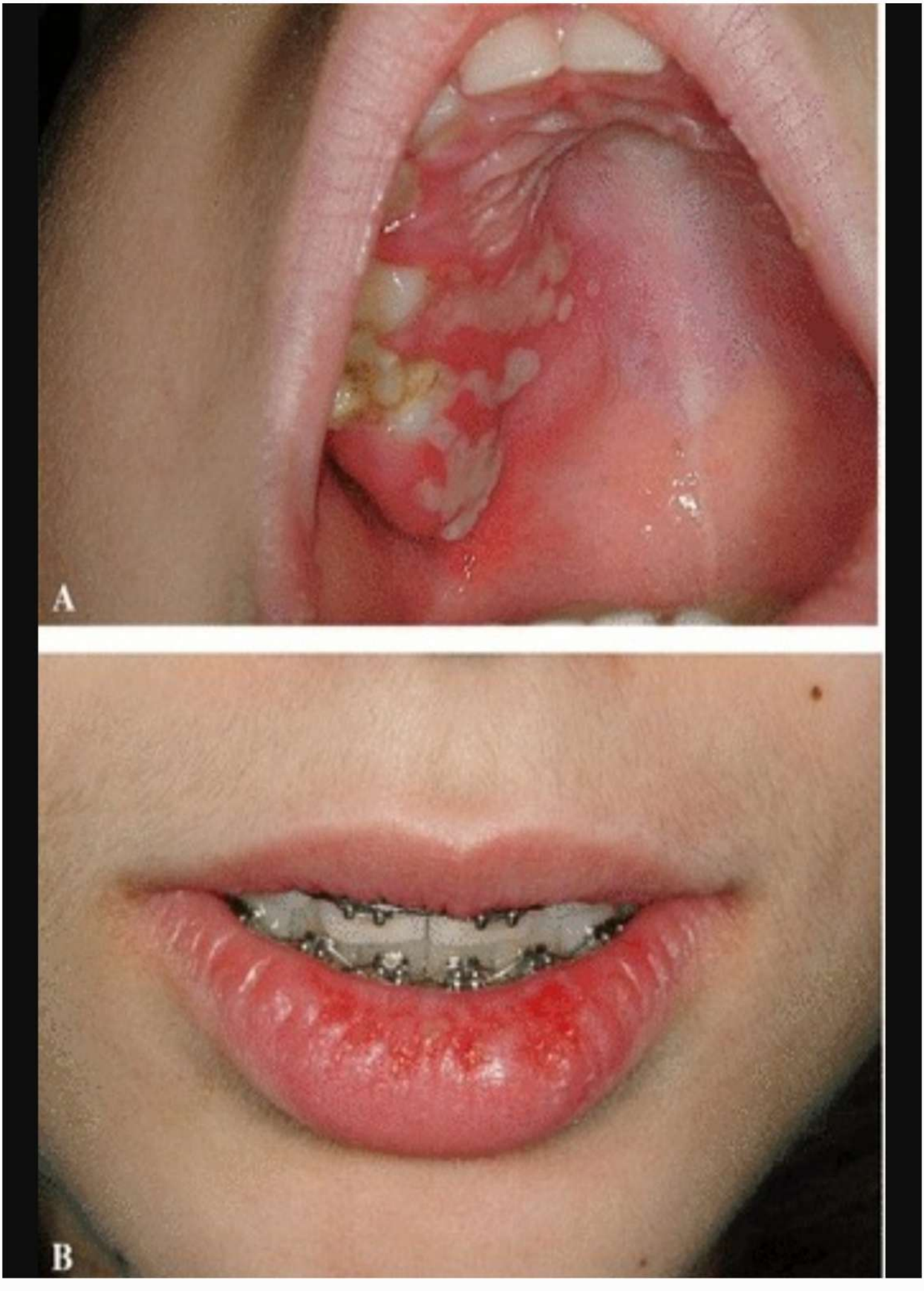
Diagnosis: Herptic gingivostomatitis

Causes : VIRAL (HSV-1)

Lesion : PRY (VESICLE WITH ERYTHEMA and edema of gingiva)

2nd(crust and erosion)

Figure 27-35. Herpes simplex: primary infection with gingivostomatitis A 43-year-old female with history of atopic dermatitis. Multiple, very painful erosions on the lower perioral skin, lips, and tongue. Tzanck smear was positive. HSV-1 detected on DFA. Methicillin-sensitive *S. aureus* (MSSA) was isolated on bacterial culture (secondary infection of herpetic lesions). HSV infection recurred on the face but without oral involvement.


A
B

HERPES simplex type1

PRIMARY ATTACK

Diagnosis: Herptic keratoconjunctivitis

Causes : VIRAL (HSV-1)

Lesion : PRY (VESICLE WITH Coreneal ulcerative and scar)

2nd(crust and erosion)

HERPES simplex type1

PRIMARY ATTACK

Diagnosis: Herptic whitlow

Causes : VIRAL (HSV-1)

Lesion : PRY (VESICLE affects finger)

2nd(crust and erosion)

Figure 27-37. Herpes simplex virus infection: herpetic whitlow A 19-year-old male with painful finger lesions for 3 days. Painful, grouped, confluent vesicles on an erythematous edematous base of the distal finger were the first (and presumed primary) symptomatic infection.

HERPES simplex type1

PRIMARY ATTACK

Diagnosis: Herptic genitalia

Causes : VIRAL (HSV-1)

Lesion : PRY (VESICLE affects genital)

2nd(crust and erosion)

Photo 4-11: Herpes genitalis.

HERPES simplex type1

Recurrent ATTACK

Diagnosis: herpus labialis

Causes : VIRAL (HSV-1)

Lesion : PRY (VESICLE)

2nd(crust and erosion)

DD: Impetigo +herpes zoster

Figure 27-36. Herpes labialis: recurrent herpes labialis (A) Edematous lateral upper lip 24 hours after onset of tingling sensation. **(B)** Grouped vesicles on moustache area 48 hours after onset of symptoms. **(C)** Crusted erosion on upper lip and moustache area 7 days after onset of symptoms. **(D)** Painful erosion on the lower lip for 5 weeks in a 66-year-old female with severe dermatoheliosis and actinic cheilitis. The diagnosis was made on lesional biopsy.

C
D

HERPES simplex type2

Primary ATTACK

Diagnosis: HSV-1

Causes : VIRAL (HSV-2)

Lesion : PRY (pain erythromatus base VESICLE)

2nd(erosion or ulceration)

Recurrent attack

Less sever than primary

Treatment of HS:

1. **General measure:**
   - Avoidance for triggering factors as possible to prevent recurrence.
   - Avoidance of direct sexual act during attacks.
2. **Topical treatments:**
   a. Drying antiseptic lotions, e.g. K-permanganate 1/8000 or 10% aluminium acetate, given in early vesicular stage.
   b. Topical acyclovir cream (Zovirax®) applied every 4 hours for 5 days. Effective only when given early during the prodromal stage of an attack (within 48 hours). It helps both reducing the attack's period and decreasing viral shedding.
   c. Topical antibiotics for secondarily infected lesions.
   c. Idoxuridine given for eye lesions.
3. **Systemic treatment:**

   Antiviral drugs, e.g. acyclovir (Zovirax®), 200mg 5 times/day for 5-10 days. It should be administered early within 48-72 hours from the appearance of the eruption.

HZV

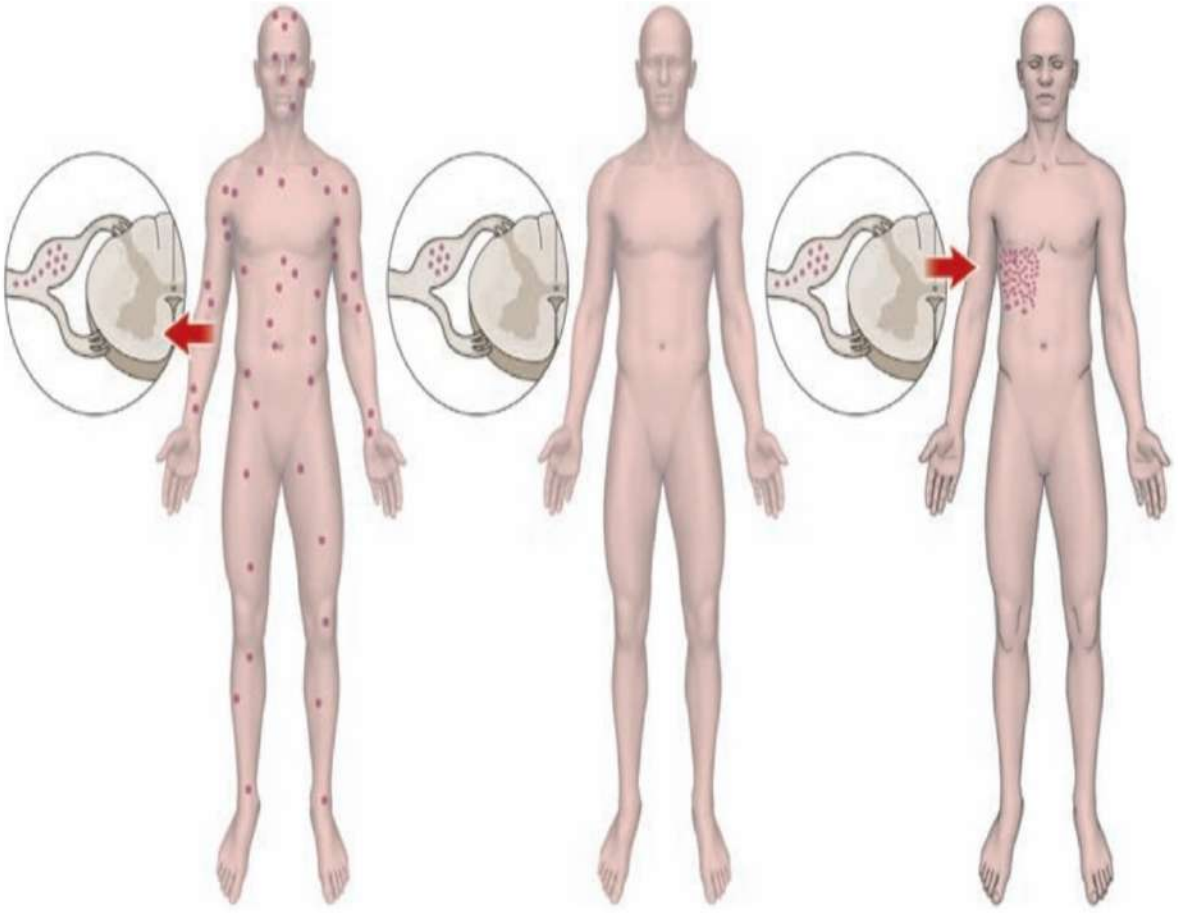


Figure 27-49. Varicella and herpes zoster (A) During primary VZV infection (varicella or chicken pox), virus infects sensory ganglia. **(B)** VZV persists in a latent phase within ganglia for the life of the individual. **(C)** With diminished immune function, VZV reactivates within sensory ganglia, descends sensory nerves, and replicates in skin.

Varicella (chickenpox)

Diagnosis: Varicella

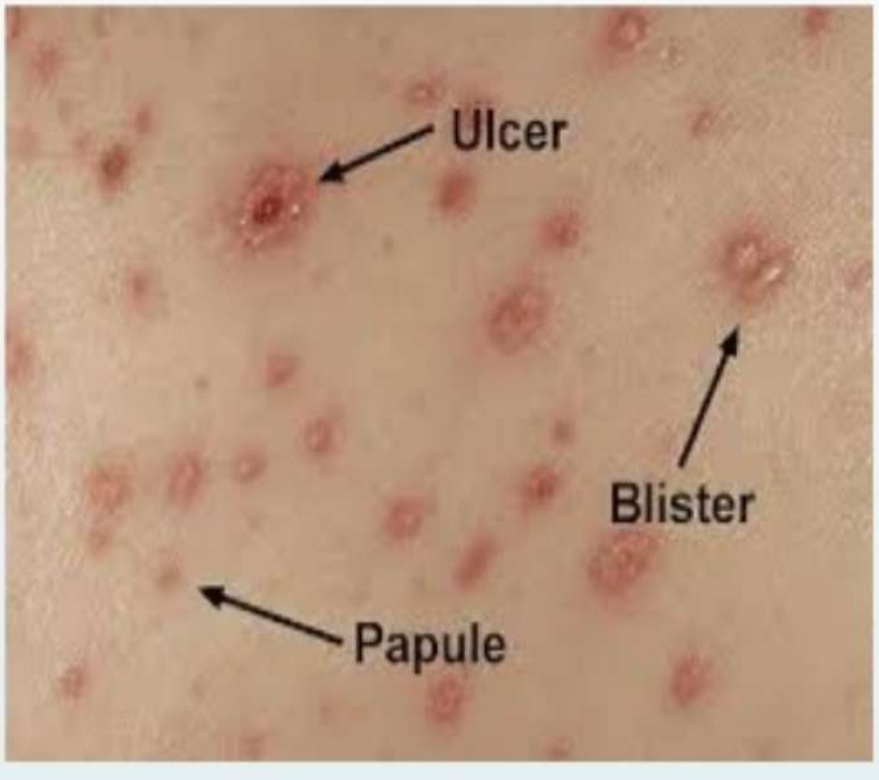
Causes : Viral (VZV)

Lesion:POLYMORPIC AND centripetal distribution

PRY(macules ' papules ' vesicle '[(pustules= may causes scar])

2nd(erosion + crust)

DD: popular urticaria + scabies



Polymorphic

Chicken pox

Figure 27-47. Varicella A 20-year-old female with pruritic eruption for 2 days. Multiple, pruritic, erythematous papules, vesicles on the face and neck. Several vesicles have evolved to crusted erosion. DFA detected VZV. No antibodies to VZV were detected.

Figure 27-48. Post-varicella scars A 28-year-old male with punched out scars on face. Varicella, which had been severe, had occurred 6 months previously. These scars may improve with time but persist for life.

Treatment of chickenpox:

1. **Topical treatments:**
   a. Soothing lotions, e.g. calamine lotion.
   b. Topical antibiotic ointment, e.g. mupirocin (Bactroban®), for locally infected lesions.
2. **Systemic treatment:**
   a. Antibiotics for secondary infection.
   b. Antiviral drugs, e.g. acyclovir (Zovirax®), 800mg 4 times/day for 5 days. It should be administered early in the course of the disease in high risk patients, e.g. immunocompromised, or in adults with severe cases.

Herpes Zoster

Site commonly affected :

- Thoracic affection.
- Cervical affection (usually C2, 3, 4).
- Trigeminal affection (including ophthalmic division).
- Lumbosacral affection.
- Appearance of vesicles on the ear pinna

Diagnosis:

Causes

Lesion PRY((grouped vesicular with erythematous base)

2nd(dry of vesicular → Crust . -erosion)

N.b: - appear along pathway of cutaneous

- Healing with scar

- Lesion may hemorrhagic or gangrenous or purulent

Figure 27-51. Herpes zoster A 65-year old male with scar from prior thyroid carcinoma surgery. Erythematous plaque with early vesiculation in left C-2 dermatome. This presentation is common and diagnosis often missed. The lesions was mildly pruritic.

Figure 27-52. Herpes zoster A 67-year old Chinese female with dermatomal zoster in L-mandibular branch of the trigeminal nerve. Bullae, vesicle, and erosions are seen. **(A)** L-face. **(B)** Tongue with erosions and deviation associated with motor involvement. Other than flu-like symptoms, she was relatively free of symptoms.

B

Treatment of HZ:

1. **Topical treatments:**
   a. Drying antiseptic lotions, e.g. K-permanganate 1/8000 or 10% aluminium acetate, given in early vesicular stage.
   b. Topical acyclovir cream (Zovirax®) applied every 4 hours for 5 days, particularly in old or immunocompromised patients.
   c. Topical antibiotics for secondarily infected lesions.
2. **Systemic treatment:**
   a. Antiviral drugs, e.g. acyclovir (Zovirax®), 800mg 5 times/day for 7 days, or famciclovir (Famvir®) 500mg 3 times/day for 7 days, or Valacyclovir (Valtrex®) 1g 3 times/day for 7 days.
   b. Analgesics, carbamazipine (Tegretol®), or gabapentin (Neurontin®), for pain of PHN.